

## A brief note before we begin...

- This slide deck is designed to give a modern and contemporary sense of how gerrymandering affects the world today
- The paper that will accompany this paper is designed to provide a more broad sense of the effects of gerrymandering

## Origins of gerrymandering and how it works

- Gerrymandering is the practice of manipulating boundaries so the results of voting will favor one party over the other
- The term originates from 1812 when a Massachusetts governor Elbridge Gerry drew a political map so strangely it looked like a salamander
- The concept of gerrymandering itself began even before 1812, when
- Gerrymandering has many different forms and schemes
  - "Cracking" a technique where votes for one party are scattered, diluting their power
  - "Packing" a technique, cramming voters into a single district, wasting their power

## Ethical issues concerning gerrymandering

- Manipulated maps are hard to come when implemented during an election
- They can be hard to detect
- Different ideas have been brought forward by different mathematicians and developers
- One such tool that has been developed is what is known as the extreme-outlier test
  - Analyze the likelihood a map would produce various election outcomes and what margins?
  - It is unlikely that a neutral map would give the GOP 10 seats and democrats only 3 reasonable voting patterns in the past

## Ethical issues concerning gerrymandering

- Gerrymandering is done by both sides of the political divide, both democrats and republicans
- It is going on within both parties
- Since the 1960s, the Supreme Court needed to step in and determine what was permissible or what district maps needed to be redrawn to make things fair.
- Cases the Supreme Court considered mainly focused on:
  - Population
  - Legislatures vs. commissions
  - > Race
  - Partisanship
- The United States Senate, as of how it stands, is considered to be the most disproportionately legislative bodies in the US government

## Modern day examples of gerrymandering

#### North Carolina

- 12th district between 2003 2016
- Example of packing

#### California

- 23rd congressional district
  - Example of packing limited to a thin area from three large counties along the coast
- 11th congressional district
  - Another example of packing
  - "Strained projections and counter projections of other district"

#### Texas

- Controversial 2003 gerrymander
- Packed seat of republicans on past results of many voting district

#### Illinois

- 17th congressional district
- Major urban centers were anchored and Decatur, IL included
- Isolated from the main district

## Court cases in regards to population

- Baker v. Carr (1962) court decided federal courts had jurisdiction to consider constitutional challenges to state legislative redistricting plans
- Geoffrey v. Cummings (1973) upheld a legislative redistricting plan in which the total deviation was 1.81 percent for the Senate and 7.83 percent for the House. The court considered plans with a 10% or less are decent enough, although it is not a safe bet
- Karcher v. Daggett (1983) Congressional districts must be mathematically equal in population
- Evenwel v. Abbott (2016) Total population is a permissible metric for calculating compliance with "one person, one vote"

## Does gerrymandering pose a problem to other Western democracies?

- No, most other western countries have a solution to this problem
- However, there is one country that has encountered a similar problem the United
  States experiences, and that is Pakistan
- In 2018, only 544 people in the assembly of Balochistan were able to vote for prime minister
- 80,000 ethnic minorities, however, did **not** get a chance to vote
- These people are the Hazaras, Pakistan's most discriminated ethnic group
- Another reason is gerrymandering, where the privileged elite manage to restrict the voting power of those less fortunate

# Other countries' approaches to gerrymandering and representation...

- Larger districts are allowed to send more than one representative to legislatures
  - o If this can be adjusted, then the one person-one vote concept can be guaranteed
- Politically neutral groups draw the boundaries of congressional or legislative districts
  - This occurs in India and Canada
  - Britain: "parliamentary distribution" is decided by a nonpartisan boundary commission
  - Parties can object to the commission's decision, but it is limited
- Boundaries could be made more difficult to move
  - In Mexico, districts are determined by an algorithm
  - The algorithm is designed by a technical committee
    - The map is reviewed twice by both political parties

## A gerrymandering simulation

- For this project we have developed a model of how a gerrymandering could occur
- The script allows for a user input 2d "nation" with user defined numbers of partisan voting clusters randomly assigned a location.
- The script splits the fictitious nation into geographically based horizontal and vertical 'districts', which often results in bias
  - Demonstrates how geographically designing districts leads to bias.
  - o Demonstrates how a seemingly fair system (just rectangles) can also be used to gerrymander
  - Shows how even in a situation as simple as just placing rectangles, the results can vary significantly based on the rectangles that result from a given run of the simulation.

### Works Cited Slide

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